

# ASIGuard II

## Seamless ASI switch

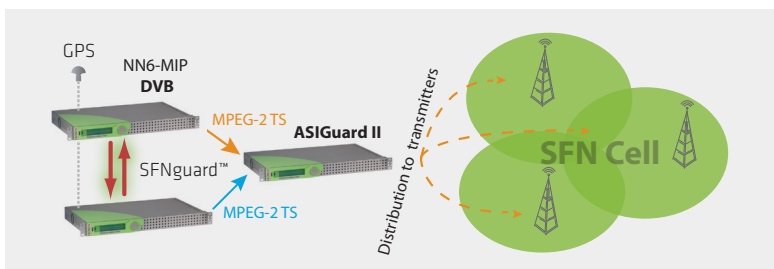


**ASIGuard II is ENENSYS cost-effective ASI seamless switch that enables 1+1 automatic redundancy mechanism of ASI equipments**

**ASIGuard II** performs an automatic change-over between two MPEG-2 Transport Streams according to the validity of the incoming streams. Upon ETR290 errors or ASI signal problems, **ASIGuard II** switches automatically from the faulty input to the valid input. It includes optionally a second ASI switch function within the same unit to enable a seamless change-over between an additional peer of MPEG-2 TS.

The **ASIGuard II** strives to provide a true seamless switch-over under the following conditions :

1 In **DVB-T Single Frequency Networks**, the **ASIGuard II** enables a unique, automatic and secured SFN seamless change-over between two ENENSYS SFN Adapter, **NN6-MIP DVB**, with the patented technology **SFNguard™**. This is mandatory to guarantee a SFN broadcasting, where all DVB-T SFN transmitters must receive the same content to transmit it over the same frequency at the very same time.



2 In **DVB-T2**, the **ASIGuard II** can seamlessly switch-over redundant T2-MI streams. It can provide an automatic 1+1 redundancy mechanism between two DVB-T2 Gateways. Combined with the ENENSYS DVB-T2 Gateway, **NN6-T2 Gateway**, and the patented technology **T2Guard™**, the **ASIGuard II** offers a safe and seamless redundancy solution for SFN and MFN DVB-T2 broadcasting.

3 Distribution or contribution of MPEG-2 TS signals can be delivered through redundant links. Both links may have different delays (satellite/IP, IP/IP with different network paths). **ASIGuard II** enables to realign both streams to seamlessly and automatically switch-over one link to another link. Thus, changing-over one network to another network as no effect on the audiovisual content carried over MPEG-2 TS. This applies also for T2-MI streams carried over different network paths.

## Applications

- **1+1 automatic changeover** for:
  - DVB standards (DVB-T/T2/H/S/C)
  - DTMB standard
  - ISDB standards
  - ATSC/ATSC-MH standards
- **TS seamless switch-over**
  - SFN seamless switching
  - Alignment of 2 identical MPEG-2 TS but delayed in a MFN environment
- **DVB-T2 seamless switch-over**
  - Seamless 1+1 redundancy of T2Gateways with **T2Guard** patent technology
  - Alignment of 2 identical T2-MI/MPEG-2 TS with delayed in a MFN or SFN environment

## Benefits

- Avoid TV black-out in SFN (and MFN in DVB-T2)
- Seamless switch-over with delayed source
- Multi-standard applicable (DVB,ATSC,ISDB,DTMB)
- **Video agnostic** : MPEG-2 or MPEG-4/H.264
- Flexible dual switch offering (enabling T/T2 mix)
- Maintain service continuity
- High-grade broadcast product
- Easy integration into any NMS

## Characteristics

- Automatic switch between 2 MPEG-2 TS
- Automatic switch between 2 T2-MI streams
- Up to 2 seamless switch function in the same unit
- 1+1 redundancy for Head-end components
- Several switching modes
- Flexible switching condition configuration
- ETR290 based switching conditions
- Passive and Advanced Passthru mechanisms
- Real-time monitoring of incoming streams
- Easy to use web-based GUI
- Full SNMP v2 support

# ASIGuard II

## Seamless ASI switch

### Input Interface

MPEG2-TS      2x ASI inputs by default  
 2x ASI additional inputs with  
 dual switch option

Control      10/100 Base-T for standard web  
 based interface

### Output Interface

MPEG2-TS      2x Mirrored ASI outputs by default  
 2x additional mirrored ASI outputs  
 with dual switch option  
 Packet/Burst mode

Availability      Basic passthru replicating the inputs  
 Advanced passthru maintaining the  
 last selected switch

Monitoring      1xASI output to monitor incoming TS

### Processing

Inputs  
 resynchronization      Realign the stream stemming from  
 different network with different  
 delays to output one single MPEG-2 TS

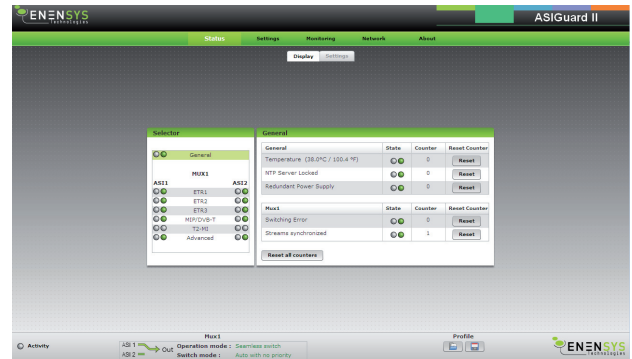
SFN preservation      Enables seamless switch in case one  
 distribution fails while maintaining  
 SFN synchronization

Switching modes      Automatic swith from one input to the  
 other one upon failure  
 Automatic switch with input priority  
 Manual switch

Switching conditions      ASI sync loss  
 ETR290 and new T2-MI alarms  
 Video and audio minimum bit rate  
 GPI input

Monitoring      Real-time monitoring of incoming  
 streams, Web-based GUI

Supervision      Full SNMP v2 support  
 Easy integration into NMS  
 Dry relay output



### Physical

Height      44 mm / 1.7 in.  
 Width      444 mm / 17.48 in.  
 Depth      274 mm / 10.79 in.  
 Format      1 RU, width 19"

Power supply      100-240VAC  
 48V DC (option)

Power consumption      20W



ASIGuardII with dual switch and dual power options

### Ordering

**ASIGuard II**      Seamless ASI switch

#### Options

- Seamless TS      MFN and SFN seamless TS switch
- Seamless T2-MI      T2-MI MFN and SFN seamless switch
- Dual Switch      Additional seamless switch function
- NN6-DualPower      Redundant power supply
- NN6-48VIn      48V DC input



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